

Daniel V. Gulino Senior Vice President and General Counsel

Via email: drps@state.ma.us

August 4, 2005

Howard B. Bernstein RPS Program Manager Massachusetts Division of Energy Resources 100 Cambridge Street Boston, MA 02114

Re: Notice of Inquiry/Stakeholder Follow-Up

Dear Howard:

At the "Stakeholder Conference" held in Worcester on July 28, 2005, I raised as an issue the potential supply of stoker biomass facilities in New York and in Canada that may not have been considered by the Division of Energy resources ("DOER") in its review of the "available" generation from biomass stoker facilities that could potentially qualify under the RPS should the stoker prohibition be removed from the regulations.

As you are aware, with respect to deliverability, the RPS program requires delivery into NEPOOL. Stoker facilities in New York will have little difficulty delivering their energy into NEPOOL. Likewise, in light of the open access transmission tariffs of both Hydro-Quebec and New Brunswick Power, the stoker facilities located in Quebec and New Brunswick can also deliver into NEPOOL regardless of whether to date they have done so.

As you may recall, after raising the issue, I was challenged by another participate at the conference to identify those stoker facilities in Canada that could participate. I asked Bill Short, of Ridgewood, to investigate the matter and he as provided a partial list of the existing or soon to be commercial stoker facilities in New York and Canada. Attached hereto is an analysis that Mr. Sort prepared entitled "Potential Supply of Renewable Energy" from biomass facilities. The first page of the document shows the available supply from "existing biomass facilities," including stokers and well as facilities currently in the RPS (e.g., Indeck facilities). Our analysis demonstrates that existing biomass facilities, if all were to come online as proposed, would supply by 2010

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76% of the total Massachusetts' REC market. The second page of the attachment adds to the potential supply all proposed "new" biomass facilities. If all of these facilities are constructed and operate, biomass facilities in New England alone would be supplying 119% of the RECs by 2010. Finally, add to that number the potential supply of biomass facilities (all of which we believe are stokers) from New York and Canada. That information can be seen on the third page of the attachment. We have located at least 242 MW (and there could be more) of additional biomass stoker facilities that could potentially participate in the Massachusetts RPS if the stoker prohibition is removed. Finally, should the stoker prohibition be removed from the regulations, it is likely that these facilities, under the Commerce Clause or NAFTA, could not legally be prevented from participating. While all of these facilities will certainly not be retooled or constructed or elect to participate, the large number of facilities clearer indicates that if the prohibition is removed at least some will participate. The impact on the REC market in such case could be potentially devastating.

Ridgewood has not investigated these facilities further to determine whether any of the existing non-New England facilities would have a vintage or whether they use or would use C&D. The purpose of our exercise was simply to highlight the existence of these stoker biomass facilities for the DOER to consider with respect to the impact of removing the stoker prohibition.

If you need further information or would like to discuss these matters further, please contact either me or Bill Short.

Very truly yours,

Daniel V. Gulino

Att.

Potential Supply Of Renewable Energy

From "Existing" New England Biomass Plants

| | Plant <u>Name</u> | Capacity (MW) | Estimated Annual Production (MWh) | Percentage Of 2010 Mass, Conn and RI Requirement | Comments |
|----------------------|----------------------|------------------|--|---|---|
| Maine | | | | | |
| | West Enfield (1) | 24.5 | 196,000 | 3.98% | Qualified In Massachusetts |
| | Jonesboro (1) | 24.5 | 196,000 | 3.98% | Qualified In Massachusetts |
| | Chester | 14.0 | 112,000 | 2.27% | Has not operated since 1994 |
| | Down East Peat (1) | 22.5 | 180,000 | 3.65% | Qualified In Massachusetts |
| | Ashland (2) | 34.0 | 272,000 | 5.52% | Same owner as Stratton |
| | Fort Fairfield (2) | 32.0 | 256,000 | 5.20% | Same owner as Stratton |
| | Sherman (2) | 20.0 | 160,000 | 3.25% | |
| | Livermore (3) | 34.0 | 272,000 | 5.52% | Qualified in CT and Advisory Ruling in Mass |
| | Greenville (3) | 15.0 | 120,000 | 2.44% | Qualified in CT and Advisory Ruling in Mass |
| | Stratton (3) (4) | 40.0 | 320,000 | 6.50% | Qualified in CT and Advisory Ruling in Mass |
| | Athens (Olde Town |) <u>15.0</u> | <u>120,000</u> | <u>2.44%</u> | Moved to Olde Town, ME and reassembled |
| | Sub-totals | 275.5 | 2,204,000 | 44.75% | |
| New Hampshire | | | | | |
| | Alexandria | 15.0 | 120,000 | 2.44% | Has not operated since 1994 |
| | Whitefield (4) | 13.8 | 110,400 | 2.24% | Qualified in Connecticut |
| | Bethlehem | 15.0 | 120,000 | 2.44% | |
| | Bio-Energy (3) | 11.0 | 88,000 | 1.79% | |
| | Bridgewater | 15.0 | 120,000 | 2.44% | |
| | Pine State (3) (6) | 4.8 | 38,400 | 0.78% | Advisory Ruling In Massachusetts |
| | Hemphill | 13.8 | 110,400 | 2.24% | Advisory Ruling In Massachusetts |
| | Tamworth | <u>20.0</u> | <u>160,000</u> | <u>3.25%</u> | |
| | Sub-totals | 108.4 | 867,200 | 17.61% | |
| Vermont | | | | | |
| | Ryegate | 15.0 | 120,000 | | |
| | McNeil | <u>52.0</u> | <u>416,000</u> | | Advisory Ruling In Massachusetts |
| | Sub-totals | 67.0 | 536,000 | 10.88% | |
| Massach | usetts | | | | |
| | Pinetree | <u>17.0</u> | <u>136,000</u> | <u>2.76%</u> | |
| | Totals | 467.9 | 3,743,200 | 76.00% | |
| Technology Breakdown | | | | | |
| | Non-Stokers (1) | 71.5 | 572,000 | | All operating with Vintage Production |
| | Stokers | 396.4 | 3,171,200 | 64.39% | Nearly all operating with no Vintage Production |

Potential Supply Of Renewable Energy

From "New" New England Biomass Plants

| | Plant <u>Name</u> | Capacity (MW) | Estimated Annual Production (MWh) | Percentage Of 2010 Mass, Conn and RI Requirement | Comments | |
|---------------|----------------------------|---------------------|-----------------------------------|---|---|--|
| Maine | GenPower - ME (3) | 40.0 | 320,000 | 6.50% | Advisory Ruling In Massachusetts | |
| Vermont | Ludlow | 20.0 | 160,000 | 3.25% | | |
| Rhode Isl | and GenPower - RI (3 |) 20.0 | 160,000 | 3.25% | Advisory Ruling In Massachusetts | |
| Massachu | usetts | | | | | |
| | Russell Biomass (3 | 50.0 | 400,000 | 8.12% | Advisory Ruling In Massachusetts | |
| | GenPower - MA (3) | 20.0 | 160,000 | 3.25% | Advisory Ruling In Massachusetts | |
| | Ware Cogen (5) | 8.6 | 68,800 | 1.40% | Qualified In Massachusetts | |
| | Various Bio-Diesel (7) | | 8,000 | 0.16% | Advisory Ruling In Massachusetts | |
| | EcoPower (3) Sub-Totals | <u>20.3</u> 99.9 | <u>162,400</u> 799,200 | <u>3.30%</u> 16.23% | Qualified In CT and Advisory Ruling in Mass | |
| New Hampshire | | | | | | |
| | Schiller #5 (3) (5) | 45.0 | 360,000 | 7.31% | Qualified In CT and Advisory Ruling in Mass | |
| | GenPower - NH (3) | | <u>320,000</u> | <u>6.50%</u> | Advisory Ruling In Massachusetts | |
| | Sub-Totals | 85.0 | 680,000 | 13.81% | | |
| | Totals | <u>264.9</u> | 2,119,200 | <u>43.03%</u> | | |
| | New England Total | s <u>732.8</u> | 5,862,400 | 119.03% | | |

Potential Supply Of Renewable Energy

From Non-New England Biomass Plants

| | | | | Percentage Of | | |
|---------------|------------------------|-----------------|-------------------------------|--|------------------------------------|--|
| | Plant C <u>Name</u> | apacity (MW) | Annual Production (MWh) | 2010 Mass, Conn and RI Requirement | Comments | |
| | | | | | | |
| New York | | | 101.000 | 0.000/ | Operating | |
| | Lyonsdale Biomass | 20.2 | 161,600 | 3.28% | Operating | |
| | Chateaugay Power (3) | <u>18.1</u> | <u>144,800</u> | <u>2.94%</u> | Operating - Same Owner as Stratton | |
| | | 38.3 | 306,400 | 6.22% | | |
| New Brunswick | | | | | | |
| | Fraser Paper | 38.5 | 308,000 | 6.25% | Operating | |
| | | | | | | |
| Quebec | | | | # G00/ | On another Come Owner on Stretten | |
| | Senneterre | 34.6 | 276,800 | 5.62% | Operating - Same Owner as Stratton | |
| | Chapais | 31.0 | 248,000 | 5.04% | Operating | |
| | Brompton | 16.0 | 128,000 | 2.60% | Post-1997 facility | |
| | Hydro Quebec Biomass | <u>84.0</u> | <u>672,000</u> | <u>13.64%</u> | Post-1997 facilities | |
| | Sub-Totals | 165.6 | 1,324,800 | 26.90% | | |
| | | | | | | |
| | Non-NE Totals | 242.4 | 1,939,200 | <u>39.37%</u> | | |
| | | | | | | |
| | Grand Totals | 975.2 | 7,801,600 | 158.41% | | |
| | | | | | | |

Assumes 8,000 hours of operation per year at rated capacity

Assumes in 2010 a 2,100,000 MWh (7%) requirement for Connecticut Class I Renewable Energy, 2,600,000 MWh (5%) requirement for Massachusetts and 225,000 MWh (2 1/2%) requirement for Rhode Island New Renewable.

- (1) Currently operating and producing NEPOOL GIS certificates qualified for the Massachusetts RPS.
- (2) Located in the Maritimes Control Area portion of Northern Maine; all other plants located in NEPOOL.
- (3) Permission obtained to burn between 50% and 100% Construction & Demolition Wood.
- (4) Currently operating and producing NEPOOL GIS certificates qualified as CT Class I Renewable Energy.
- (5) Non-biomass power plant to be rebuilt to burn biomass.
- (6) Existing biomass plant that made only steam after 1994.
- (7) Actually several small bio-diesel and other biomass R&D projects.